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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/057,458	01/23/2002	Christopher Pasqualino	13316US02	1287

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EXAMINER	
WONG, WARNER	

ART UNIT	PAPER NUMBER
2668	

DATE MAILED: 11/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/057,458	PASQUALINO, CHRISTOPHER	
	Examiner	Art Unit	
	Warner Wong	2668	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on *1/23/02*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-11,14-17 and 20* is/are rejected.

7)☒ Claim(s) *12-13,18 and 19* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *23 January 2005* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Objections

1. The following claims are objected to because of the following informalities:

Claim 7, line 1: "HSYNC" is misspelled as "HYSNC" per description of specification.

Claim 10, line 1: "VSYNC" is misspelled as "VYSNC" per description of specification.

Claim 12, line 2: "VSYNC" is misspelled (in 2 locations) as "VYSNC" per description of specification.

Claim 13, line 2: "VSYNC" is misspelled (in 2 locations) as "VYSNC" per description of specification.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-5 are rejected under 35 U.S.C. 102(b) as being anticipated by Dangi (5,231,492).

Regarding claim 1, Dangi describes a method/system of transporting video and audio data comprising:

receiving, by a first transmitter a video data stream (fig. 3, #6,11 & "video input");

receiving, by the first transmitter an audio stream (fig. 3, #6,11 & "audio input");

generating by the first transmitter, a composite data stream to a second transmitter (fig. 3, #68);

communicating the composite data stream by the first transmitter to the second transmitter (fig. 3, arrow from #6,11 to #68);

communicating the composite data stream by the second transmitter (fig. 3, #10) to the remote receiver (col. 6, lines 51-53);

Regarding clam 2, Dangi describes all limitations set forth in claim 1.

Dangi further describes that the composite data stream is sent over a digital communications link to the remote receiver (fig. 3, A/D #1, 3 digitizing the inputs and col.6, lines 29-35);

Regarding claim 3, Dangi describes all limitations set forth in claim 1.

Dangi further describes that the video data stream is a data enable signal (col. 6, line 38-47, where the delaying & multiplexing of audio signal corresponds to [data enabled by] the length of the variable video signal);

Regarding claim 4, Dangi describes all limitations set forth in claim 1.

Dangi further describes that the audio data stream is prepended to said video data stream (fig. 5, format A & B);

Regarding claim 5, Dangi describes all limitations set forth in claim 1.

Dangi further describes the reconstruction of the video and audio data streams from said composite stream (col. 6, lines 51-53);

3. Claims 6-10 and 20 are rejected under 35 U.S.C. 102(e) as being anticipated by Ishibashi (2003/0043142).

Regarding claim 6, Ishibashi describes a system/method of communicating data over a communications link which uses (shortens) a blanking period in the data to accommodate auxiliary data (paragraph 10).

Regarding claim 7, Ishibashi describes all limitations set forth in claim 6. Ishibashi further describes modifying the HSYNC signal to accommodate the auxiliary (video control) data (paragraph 94, "The video control data can be transmitted not only in the vertical blanking period [of the VSYNC] but also in the horizontal blanking period [of the HSYNC]", where paragraph 58 explicitly explains the vertical blanking period mapping to the high periods of VSYNC, "During a vertical blanking period when the vertical sync signal (VSYNC) is high in level,..").

Regarding claim 9, Ishibashi describes all limitations set forth in claim 6. Ishibashi further illustrates that the communication link is a digital (paragraph 21 and fig. 5A-5H).

Regarding claim 10, Ishibashi describes all limitations set forth in claim 6. Ishibashi further describes modifying the VSYNC signal when auxiliary data is to be transmitted (paragraph 94, "The video control data can be transmitted not only in the vertical blanking period [of the VSYNC] but also in the horizontal blanking period [of the HSYNC]", where paragraph 58 explicitly explains the vertical blanking period mapping to the high periods of VSYNC, "During a vertical blanking period when the vertical sync signal (VSYNC) is high in level,..").

Regarding claim 11, Ishibashi describes all limitations set forth in claim 6. Ishibashi further describes inserting a notch (video control data) in all VSYNC signal [which auxillary data is transmitted] (paragraph 94, "The video control data can be transmitted not only in the vertical blanking period [of the VSYNC] but also in the horizontal blanking period [of the HSYNC]", where paragraph 58 explicitly explains the vertical blanking period mapping to the high periods of VSYNC, "During a vertical blanking period when the vertical sync signal (VSYNC) is high in level,..").

Regarding claim 20, Ishibashi describes a system for communicating data and auxiliary data over a video communications link, comprising:

a reformatter (decoder) adapted to shorten a blanking period in the data to accommodate auxiliary data, forming at least one frame (of 4 bits) (paragraph 58, "During a vertical blanking period when the vertical sync signal (VSYNC) is high in level, in period of lines 2 and 264, video control data of four bits is output from the digital YUV data output terminal of the DVD decoder 112, and supplied of the VGA controller 113 through the digital YUV data signal line.");

a transmitter (inherent) communicating with the reformatter (decoder) and adapted to transmit said at least one frame over the communications link (fig. 1, video bus).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ishibashi in view of Shakiba (2002/0118762).

Regarding claim 8, Ishibashi describes all limitations set forth in claim 6.

Ishibashi lacks what Shakiba further describes: the (auxiliary) data over the video link DVI may be audio data (paragraph 36, "In particular, the system and method utilize a mechanism to carry a digital audio signal over a Digital Visual Interface (DVI) link.")

It would have been obvious to one with ordinary skills in the art at the time of invention by applicant to modify the DVI link to carry audio link . The motivation being that it will address the following problem, "Since the handling of digital audio transmissions is not addressed by this DVI protocol, display devices featuring speakers and/or microphones require extra connections to carry audio information", Shakiba, paragraph 3).

5. Claims 14-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ishibashi as applied to claim 10 above, and further in view of Kim (6,870,930).

Regarding claim 14, Ishibashi describes all limitations set forth in claim 10.

Ishibashi lacks what Kim describes: adapting control signals (col. 9, lines 12-16) to be compliant with the HDCP (content protection) standard (col. 9, lines 37-64, where the control signals sent during DE low period are corrupted according to the DE corruption protocol which complies with HDCP.)

It would have been obvious to one with ordinary skill in the art at the time of invention by applicant to adapt (secure) the video control signals to a content protection standard. The motivation being that "There is [also] a need for secure communication as a result of increase value of the communicated content [control signals] and the increased likelihood that communicated content will be copied or altered", Kim, col. 1, lines 30-34).

Regarding claim 15, Ishibashi and Kim describe all limitations set forth in claim 14. Kim further describes that the control signal is transmitted while in the blank period [when the auxiliary data is transmitted] (col. 9, lines 37-64).

Regarding claim 16, Ishibashi and Kim describe all limitations set forth in claim 14. Kim further describes that (one of the) control signals is ctl3 (col. 9, lines 15, control[3]).

Regarding claim 17, Ishibashi and Kim describe all limitations set forth in claim 14. Kim further describes that the content protection standard comprises a High-bandwidth Digital Content Protection (HDCP) standard (col. 9, line 64).

Allowable Subject Matter

6. Claims 12-13 and 18-19 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Warner Wong whose telephone number is 571-272-8197. The examiner can normally be reached on 5:30AM - 2:00PM, M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chieh Fan can be reached on 571-272-3042. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Warner Wong
Examiner
Art Unit 2668

WW

Chieh M. Fan

CHIEH M. FAN
PRIMARY EXAMINER